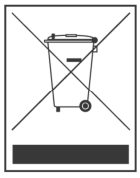
WLX-3000B

wireless ceiling PoE
access point N300



Revision 2.0
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Note: All the information contained in this manual was correct at the time of publication.

However, as our engineers are always updating and improving the product, your device's software may have a slightly different appearance or modified functionality than presented in this manual.

Table of Contents

Table of Contents

Introduction....8

1 KEY FEATURES....9

2 PACKAGE CONTENTS....10

3 CAUTIONS....11

3.1 Usage Cautions....11

3.2 Power....11

3.3 Repair....11

3.4 Disposing of the Access Point....12

3.5 Others....12

4 PRODUCT LAYOUT....13

LED Definition....14

5 NETWORK + SYSTEM REQUIREMENTS....15

6 WLR-3000B PLACEMENT....16

7 CONNECT BEFORE USE....17

8 PC NETWORK ADAPTER SETUP FOR FIRST SETUP....18

9 BRINGING UP THE WLR-3000B....25

10 INITIAL SETUP WLR-3000B 25

LOGIN procedure 25

11 STATUS 27

System Status 27
DHCP Server 28
Device Status 30
DHCP Status 30
Log 32
Statistics 33

12 WIRELESS SETTINGS 33

Enable 34
Basic 35
Advanced 36
Security 38
ACL 43
WPS 45

13 TOOLBOX 47

Password 47
Timezone 48
Firmware 49
Back-up 50
Reset 51
LED Control 51

Diagnostics.....52

14 SETTING PC NETWORK SETTINGS TO DYNAMIC IP.....53

Sitecom Europe BV

EC Declaration of Conformity

We
Sitecom Europe BV
Linatebaan 101
3045 AH Rotterdam
The Netherlands

Hereby declare under our sole responsibility that the Sitecom product:

Product number: **WLX-3000B v1001**
Product description: **Wireless Ceiling PoE Access Point N300**

To which this declaration relates is in conformity with the requirements of the following standards:

CE/LVD
- EN 60950-1: 2006+A11 (2009)

CE/EMC
- EN 301 489-1 V1.8.1
- EN 301 489-17 V2.1.1

RADIO SPECTRUM
- EN 300 328 V1.7.1 2006-10
- EN 50385 2002

This certifies that the following designated Sitecom product:

Product number: **WLX-3000B v1001**
Product description: **Wireless Ceiling PoE Access Point N300**

Complies with the requirements of the following directives and carries the CE marking accordingly:
R&TTE Directive 99/5/EC, EMC directive 2004/95/EC and Low Voltage Directive 2006/95/EC.
This declaration is the responsibility of the manufacturer / importer:

Sitecom Europe B.V.
Rotterdam, 21 june 2012

P. Schoonenberg,

CEO

SITECOM

(UK) CE COMPLIANCE

Hereby Sitecom Europe BV declares that this product is in accordance with essential requirements and other relevant terms of the European regulation 1999/5/EC.

(FR) CONFORMITE CE

Par la présente Sitecom Europe BV, déclare que l'appareil est conforme aux exigences essentielles et aux dispositions pertinentes de la Directive Européenne 1999/5/EC.

(DE) CE-CONFORMITÄT

Hiermit erklärt Sitecom Europe BV, dass dieses Produkt die erforderlichen Voraussetzungen und andere relevante Konditionen der europäischen Richtlinie 1999/5/EC erfüllt.

(IT) CONFORMITA ALLE NORME CE

Con la presente Sitecom Europe BV dichiara che questo prodotto è conforme ai requisiti essenziali e agli altri termini rilevanti della Direttiva Europea 1999/5/EC.

(NL) CE GOEDKEURING

Hierbij verklaart Sitecom Europe BV dat dit product in overeenstemming is met de essentiële eisen en andere relevante bepalingen van Europese Richtlijn 1999/5/EC.

(ES) CONFORMIDAD CON LA CE

Por la presente Sitecom Europe BV declara que este producto cumple con los requisitos esenciales y las otras provisiones relevantes de la Directiva Europea 1999/5/EC.

(PT) CONFORMIDADE CE

Pela presente a Sitecom Europe BV declara que este produto está em conformidade com os requisitos essenciais e outras condições relevantes da regulamentação Europeia 1999/5/EC.

(SE) CE-FÖRSÄKRAN

Härmed försäkrar Sitecom Europe BV att denna produkt uppfyller de nödvändiga kraven och andra relevanta villkor EU-direktivet 1999/5/EC.

(DK) OVERENSSTEMMELSESERKLÆRING

Sitecom Europe BV bekræfter hermed, at dette produkt er i overensstemmelse med væsentlige krav og andre betingelser i henhold til Rådets direktiv 1999/5/EC.

(NO) CE-OVERENSSTEMMELSE

Sitecom Europe BV erklærer herved at dette produktet er i overensstemmelse med de avgjørende kravene og andre relevante vilkår i den europeiske forskriften 1999/5/EC.

(FI) CE-HYVÄKSYNTÄ

Täten Sitecom Europe BV ilmoittaa, että tämä tuote on yhdenmukainen direktiivin 1999/5/EC olennaisten vaatimusten ja muiden asiaankuuluvien sopimusehtojen kanssa.

(RU) СООТВЕТСТВИЕ ТРЕБОВАНИЯМ CE

Настоящим компания Sitecom Europe BV заявляет, что ее продукция соответствует основным требованиям и условиям Европейской Директивы 1999/5/EC.

(PL) CERTYFIKAT ZGODNOŚCI CE

Sitecom Europe BV niniejszym oświadcza, że ten produkt spełnia wszelkie niezbędne wymogi, a także inne istotne warunki dyrektywy europejskiej 1999/5/WE.

(GR) ΣΥΜΜΟΡΦΩΣΗ ΜΕ CE

Η Sitecom Europe BV δηλώνει, διά του παρόντος, ότι αυτό το προϊόν συμμορφώνεται με τις ουσιώδεις απαιτήσεις και τους λοιπούς όρους του ευρωπαϊκού κανονισμού 1999/5/EC.

CE !

FOR USE IN:

NL	BE	LU	FR
ES	CH	PT	UK
DE	AT	SE	DK
IT	NO	SF	IE

Introduction

Congratulations on your purchase of the WLR-3000B Wireless N300 Ceiling Access Point . The WLR-3000B is compliant with 802.11n and up to 6 times faster than standard 802.11g based devices while still being compatible with 802.11g & 802.11b devices.

At 300 Mbps wireless transmission rate, the Access Point advanced MIMO (Multi-Input, Multi-Output) technology to transmit multiple streams of data in a single wireless channel, giving you seamless access to multimedia content. The robust RF signal travels farther, eliminates dead spots and extends the network range. For data protection and privacy, the WLR-3000B encodes all wireless transmissions with WEP, WPA, or WPA2 encryption.

1 Key Features

Features	Advantages
Incredible Data Rate up to 300Mbps*	**Heavy data payloads such as MPEG video streaming**
IEEE 802.11n Compliant and backwards compatible with 802.11b/g	**Fully Interoperable with IEEE 802.11b / IEEE802.11g compliant devices with legacy protection**
Support 802.1x authenticator, 802.11i (WPA/WPA2, AES), VPN pass-through	**Provide mutual authentication (Client and dynamic encryption keys to enhance security**
WDS (Wireless Distribution System)	**Make wireless AP and Bridge mode simultaneously as a wireless repeater**

** Theoretical wireless signal rate based on IEEE standard of 802.11b, g, n chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate. All specifications are subject to change without notice.*

2 Package Contents

Open the package carefully, and make sure that none of the items listed below are missing. Do not discard the packing materials, in case of return; the unit must be shipped back in its original package.

1. The WLR-3000B Access Point
2. A 110V~240V to 12V 1A Switching Power Adapter
3. A Quick Install Guide
4. A CD (User's Manual)
5. A Warranty card
6. An UTP cable

3 Cautions

This Access Point's design and manufacturer has your safety in mind. In order to safely and effectively use this Access Point, please read the following before usage.

3.1 Usage Cautions

The user should not modify this Access Point. The environmental temperature should be within +5 ~ +35 degrees Celsius.

3.2 Power

The Access Point's power voltage is DC 12V 1A.

When using this router, please connect the supplied AC adapter or AC adapter cable to the router's power jack. When placing the adapter cable, make sure it can not get damaged or be subject to pressure. To reduce the risk of electric shock, unplug the adapter first before cleaning it. Never connect the adapter to the router in a humid or dusty area. Do not replace the adapter or cable's wire or connector.

The Device can also be powered via Ethernet via a PoE injector. Please make sure this device is 802.3af compatible.

3.3 Repair

If the Access Point has a problem, you should take it to an appointed repair centre and let the specialists do the repair. Never repair the Access Point yourself, you might damage the Access Point or endanger yourself.

3.4 Disposing of the Access Point

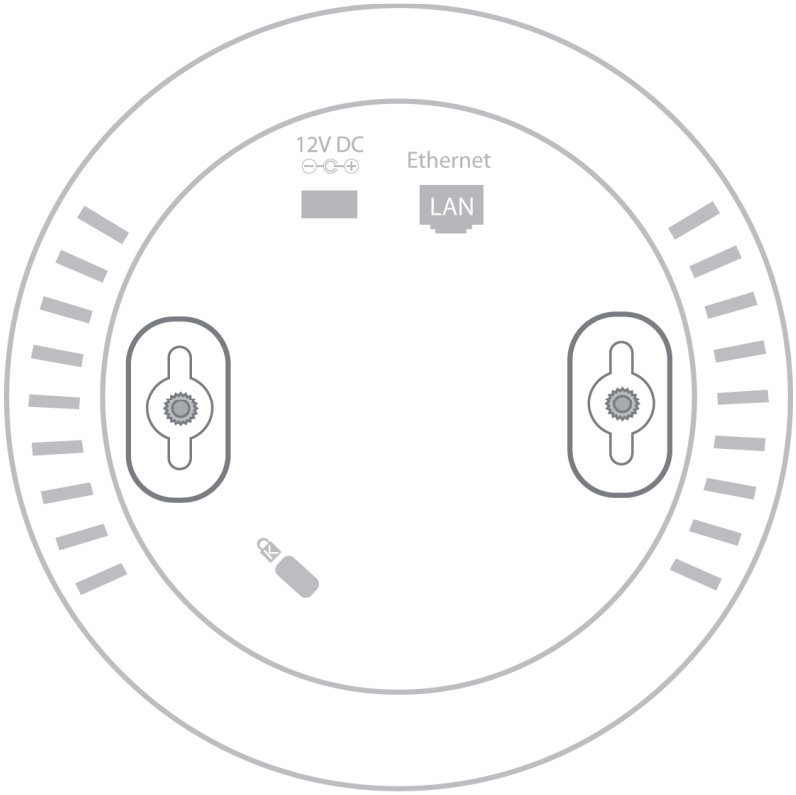
When you dispose the Access Point , be sure to dispose it appropriately. Some countries may regulate disposal of an electrical device, please consult with your local authority.

3.5 Others

When using this Access Point, please do not let it come into contact with water or other liquids. If water is accidentally spilled on the Access Point, please use a dry cloth to absorb the spillage. Electronic products are vulnerable, when using please avoid shaking or hitting the Access Point, and do not press the buttons too hard.

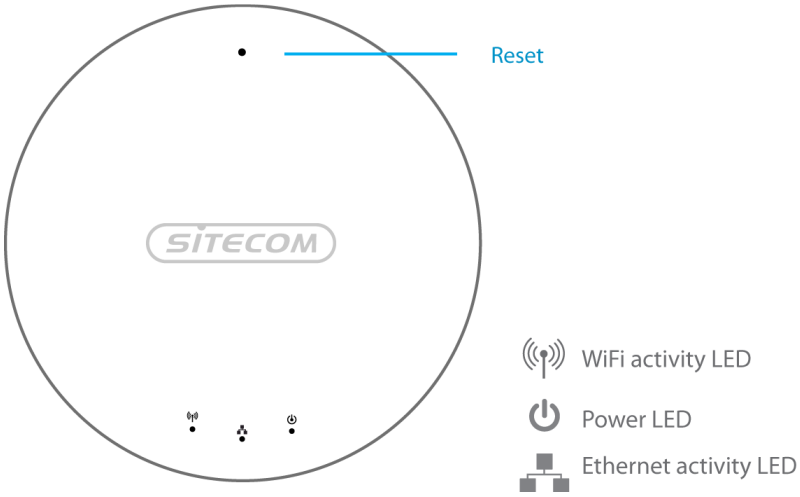
- Do not let the Access Point come into contact with water or other liquid.
- Do not disassemble, repair or change the design of the Access Point, any damage done will not be included in the repair policy.
- Avoid hitting the Access Point with a hard object, avoid shaking the Access Point and stay away from magnetic fields.
- If during electrostatic discharge or a strong electromagnetic field the product will malfunction, unplug the power cable. The product will return to normal performance the next time it is powered on.

4 Product Layout



Port	Description
Power connector	Connect the 12V DC adapter to this port
Ethernet	Connect your ADSL/Cable modem to this port

LED Definition



Port	Description
Ethernet (Blue)	Shows the cable is connected.
WiFi (Blue)	Shows WiFi activity.
Power (Blue)	Shows the device is turned on.

5 Network + System Requirements

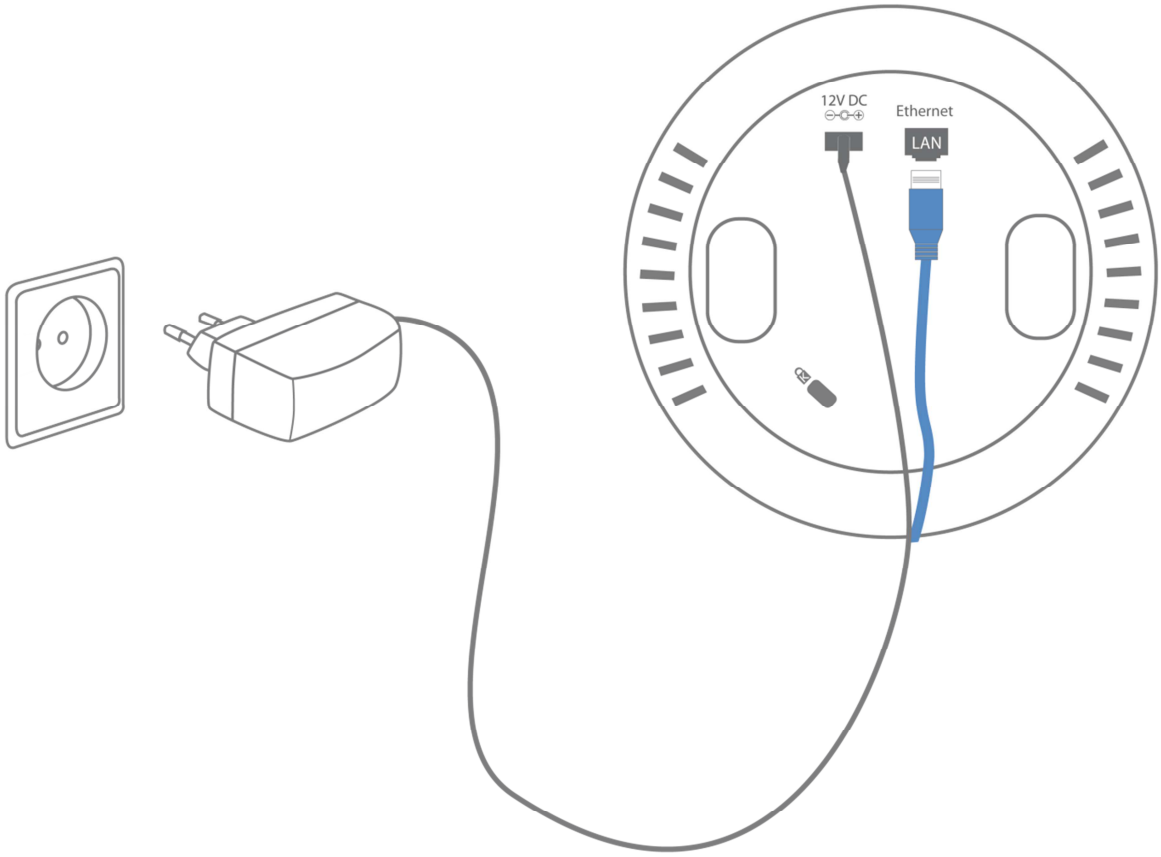
To begin using the WLR-3000B, make sure you meet the following as minimum requirements:

- PC/Notebook.
- Operating System – Microsoft Windows XP/Vista/Seven
- 1 Free Ethernet port.
- WiFi card/USB dongle (802.11 b/g/n) – optional.
- External xDSL (ADSL) or Cable modem with an Ethernet port (RJ-45).
- PC with a Web-Browser (Internet Explorer, Safari, Firefox, Opera)
- Ethernet compatible CAT5e cables.

6 WLR-3000B Placement

The WLX-3000B is intended for placement on the ceiling. For optimal performance, place your Wireless Access Point in the center of your home (or your office) in a location that is away from any potential source of interference, such as a metal wall or microwave oven.

7 Connect before use

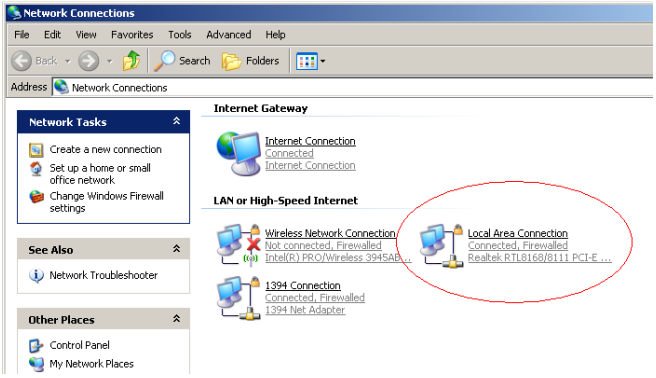


8 PC Network Adapter setup for first setup

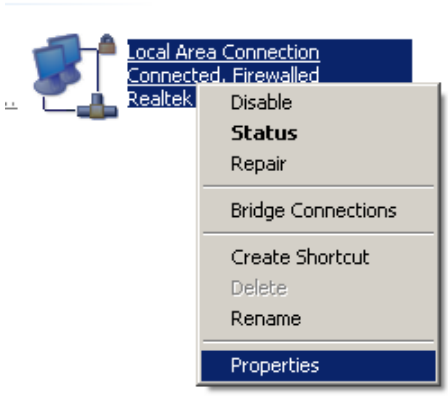
To configure the WLX-3000B for the first time it is advised to set your pc to a static IP address as explained in the following steps.

Windows XP

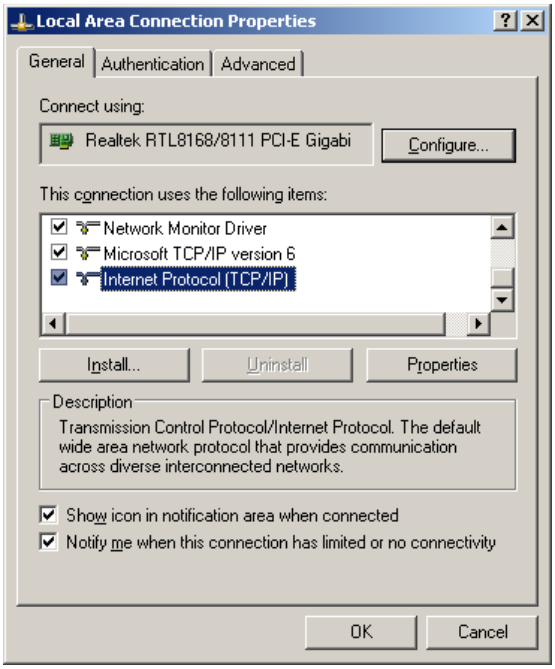
- Enter [Start Menu] → select [Control panel] → select [Network].

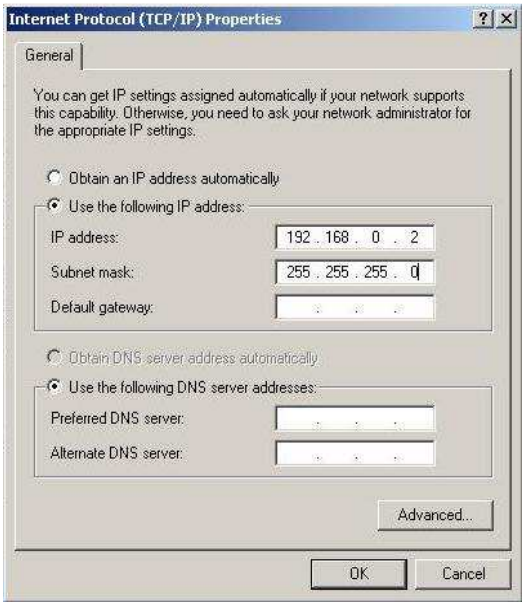


- Select [Local Area Connection]) icon=>select [properties]



- Select [Internet Protocol (TCP/IP)] =>Click [Properties].




Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
192 . 168 . 0 . 2
Subnet mask:
255 . 255 . 255 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

- Select the [General] tab.

Select 'Use the following IP address', then input the following settings in the respective fields:

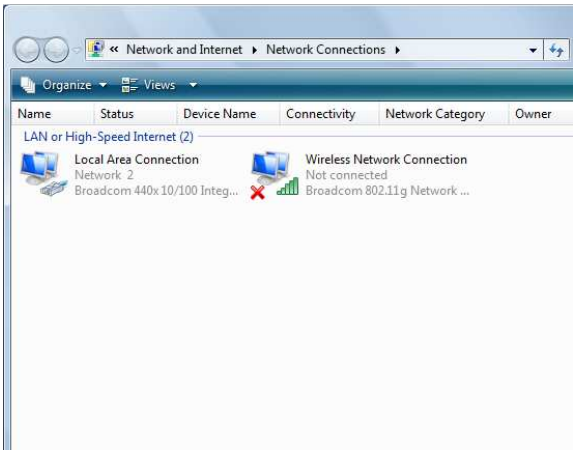
IP address: **192.168.0.2**

Subnet Mask: **255.255.255.0**

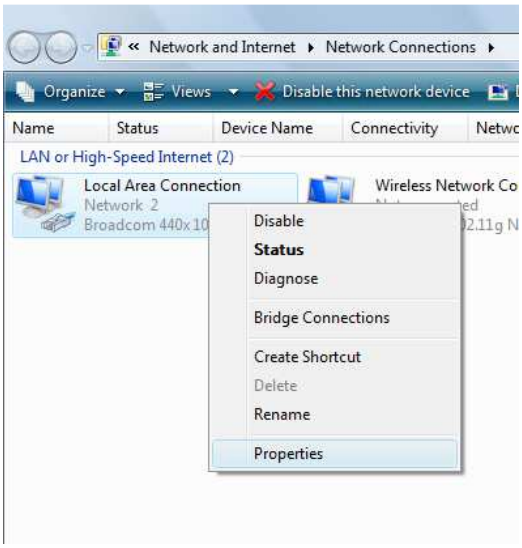
Click 'OK' when finished.

Windows Vista/Seven

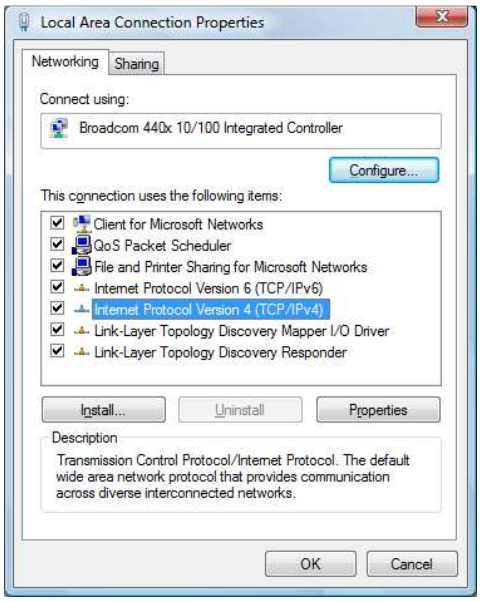
- Enter [Start Menu] → select [Control panel] → select [View network status and tasks] -> select [Manage network connections].



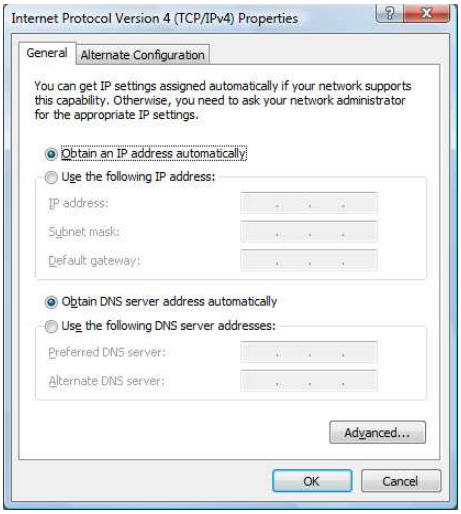
- Select [Local Area Connection]) icon=>select [properties]



- Select [Internet Protocol Version 4 (TCP/IPv4)] =>Click [Properties].



- Select the [General] tab.


Internet Protocol Version 4 (TCP/IPv4) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

Select 'Use the following IP address', then input the following settings in respective fields:

IP address: **192.168.0.2**

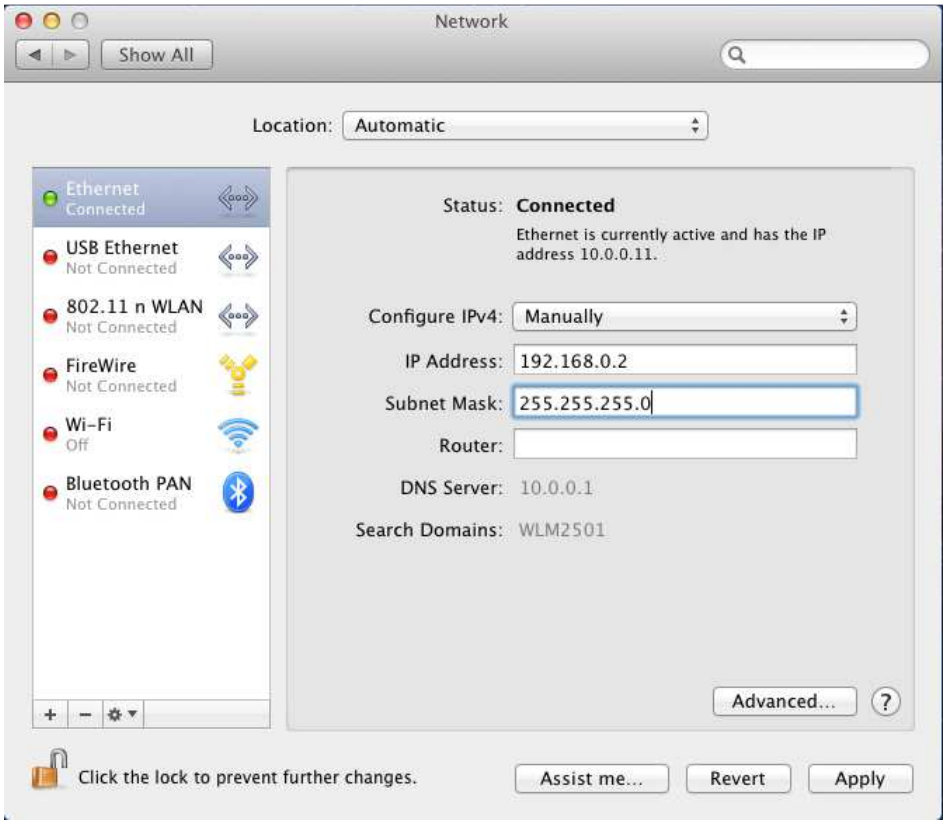
Subnet Mask: **255.255.255.0**

Click '**OK**' when finished.

MAC OS

- Click on '**System preferences**'.

- Click on '**Network**'.



Select Configure IPv4 : '**Manually**', then input the following settings in respective fields:

IP address: **192.168.0.2**

Subnet Mask: **255.255.255.0**

Click '**Apply**' when finished.

Please note once the WLX-3000B has been set up for use and placed on the desired location, the static IP address is no longer required. See Chapter 14 for Setting PC Network settings to dynamic IP.

9 Bringing up the WLR-3000B

For initial setup it is advised to set the computer to a local Ip address within the range of the Access point (192.168.0.x) as explained in chapter 8. After setting the computer to the local IP the WLX-3000B can be directly connected to the PC via a network cable.

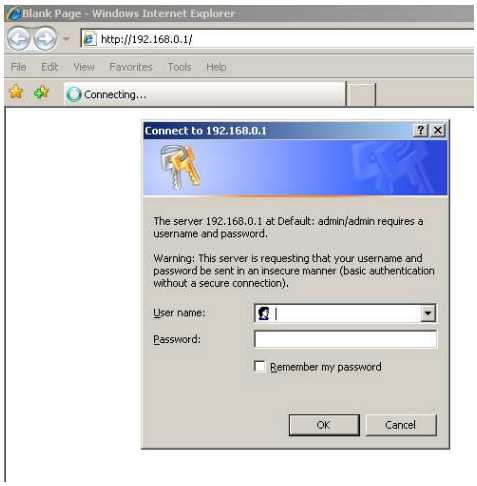
Connect the supplied power-adapter to the power inlet port and connect it to a wall outlet. Switch on the power via the switch on the back of the device. The WLR-3000B automatically enters the self-test phase. During self-test phase, the Power LED will be lit continuously to indicate that this product is in normal operation.

10 Initial Setup WLR-3000B

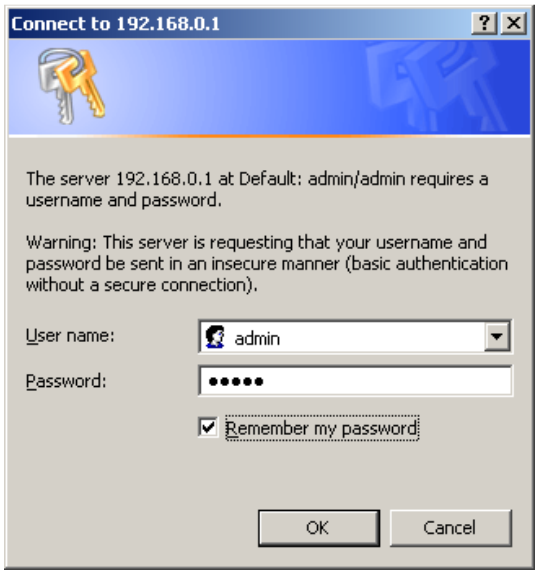
LOGIN procedure

1. OPEN your browser (e.g. Internet Explorer).

2. Type http://192.168.0.234 in the address bar and press [Enter]

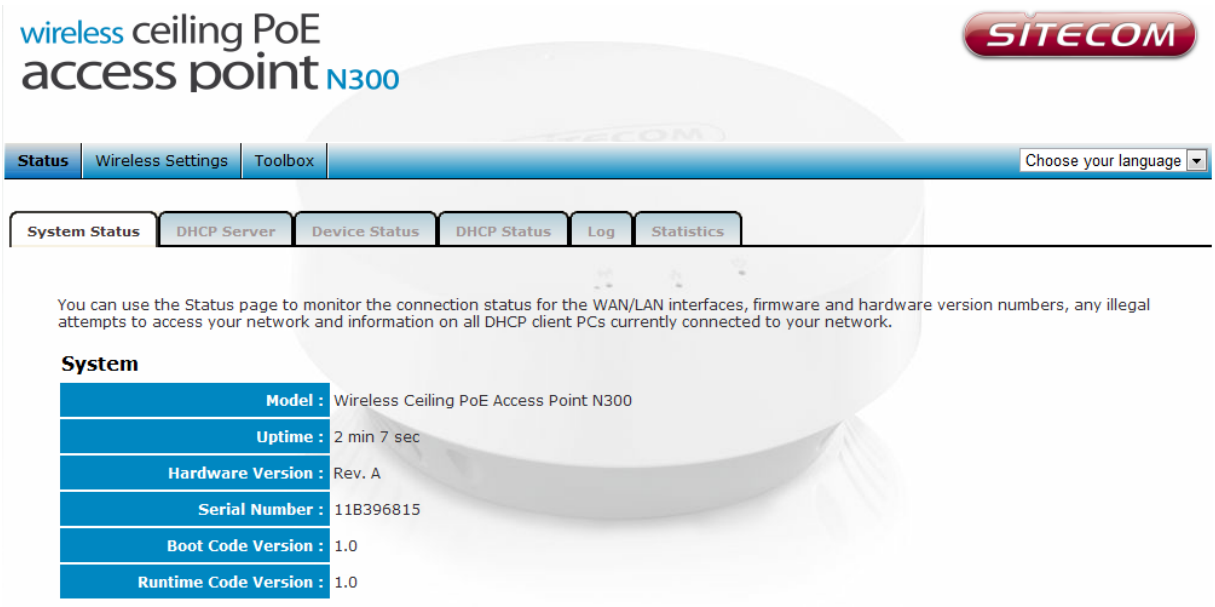

Blank Page - Windows Internet Explorer
http://192.168.0.1/
File Edit View Favorites Tools Help
Connecting...
Connect to 192.168.0.1
The server 192.168.0.1 at Default: admin/admin requires a username and password.
Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection).
User name:
Password:
Remember my password
OK
Cancel

3. Type user name and password (default username is '**admin**', the password can be found on the back of the Access Point).


Connect to 192.168.0.1
The server 192.168.0.1 at Default: admin/admin requires a username and password.
Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection).
User name:
admin
Password:
Remember my password
OK
Cancel

4. Click **OK**.
5. You will see the home page of the WLR-3000B.

11 Status

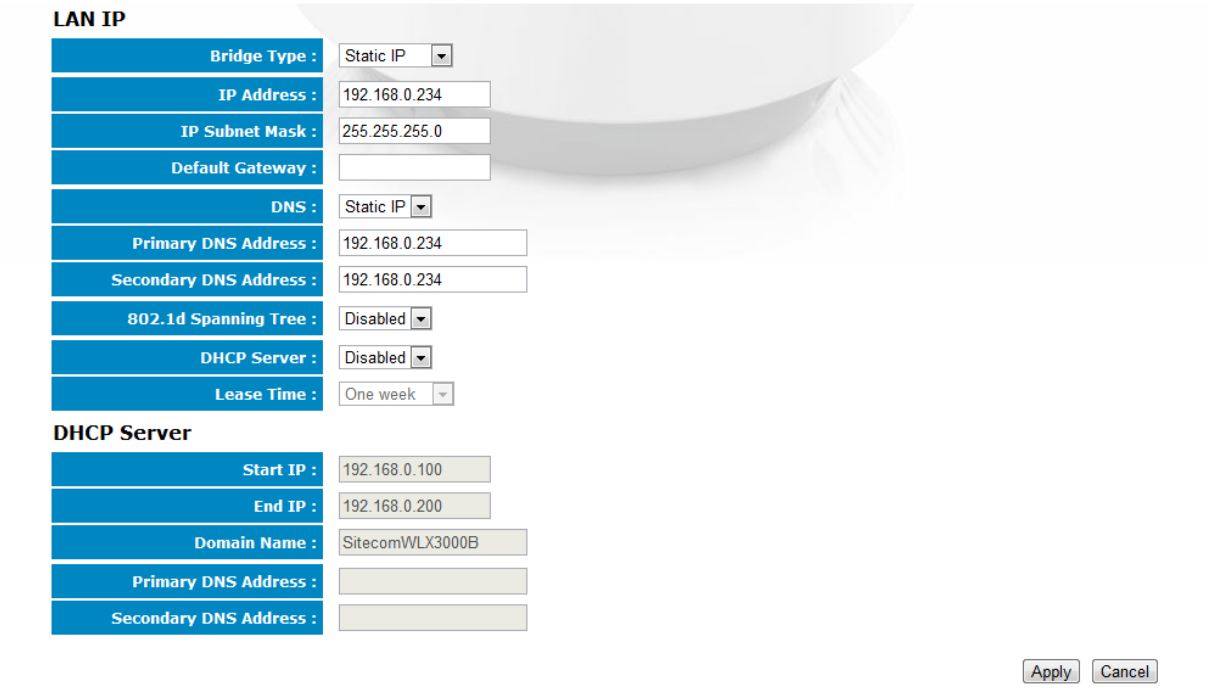

wireless ceiling PoE
access point N300
SITECOM
Status
Wireless Settings
Toolbox
Choose your language
System Status
DHCP Server
Device Status
DHCP Status
Log
Statistics
You can use the Status page to monitor the connection status for the WAN/LAN interfaces, firmware and hardware version numbers, any illegal attempts to access your network and information on all DHCP client PCs currently connected to your network.
System
Model : Wireless Ceiling PoE Access Point N300
Uptime : 2 min 7 sec
Hardware Version : Rev. A
Serial Number : 11B396815
Boot Code Version : 1.0
Runtime Code Version : 1.0

System Status

Operation Mode	The device is currently in which mode.
System Time	The device's system time. If this is incorrect, please set the time in the Tools / Time page.
Hardware Version	Hardware information for this device.
Root code, Runtime code version	Firmware information for this device.

DHCP Server

The DHCP server tab gives you the opportunity to change the IP settings of the WLR-3000B.



Click **<Apply>** at the bottom of this screen to save any changes.

Bridge type

IP address 192.168.0.1. It is the router's LAN IP address (Your LAN clients default gateway IP address).

IP Subnet Mask 255.255.255.0 Specify a Subnet Mask for your LAN segment.

802.1d Spanning Tree is Disabled by default. If the 802.1d Spanning Tree function is enabled, this router will use the spanning tree protocol to prevent network loops.

DHCP Server Enabled by default. You can enable or disable the DHCP server. When DHCP is disabled no ip-addresses are assigned to clients and you have to use static ip-addresses. When DHCP server is enabled your computers will be assigned an ip-address automatically until the lease time expires.

Lease Time Forever. In the Lease Time setting you can specify the time period that the DHCP lends an IP address to your LAN clients. The DHCP will change your LAN client's IP address when this time threshold period is reached.

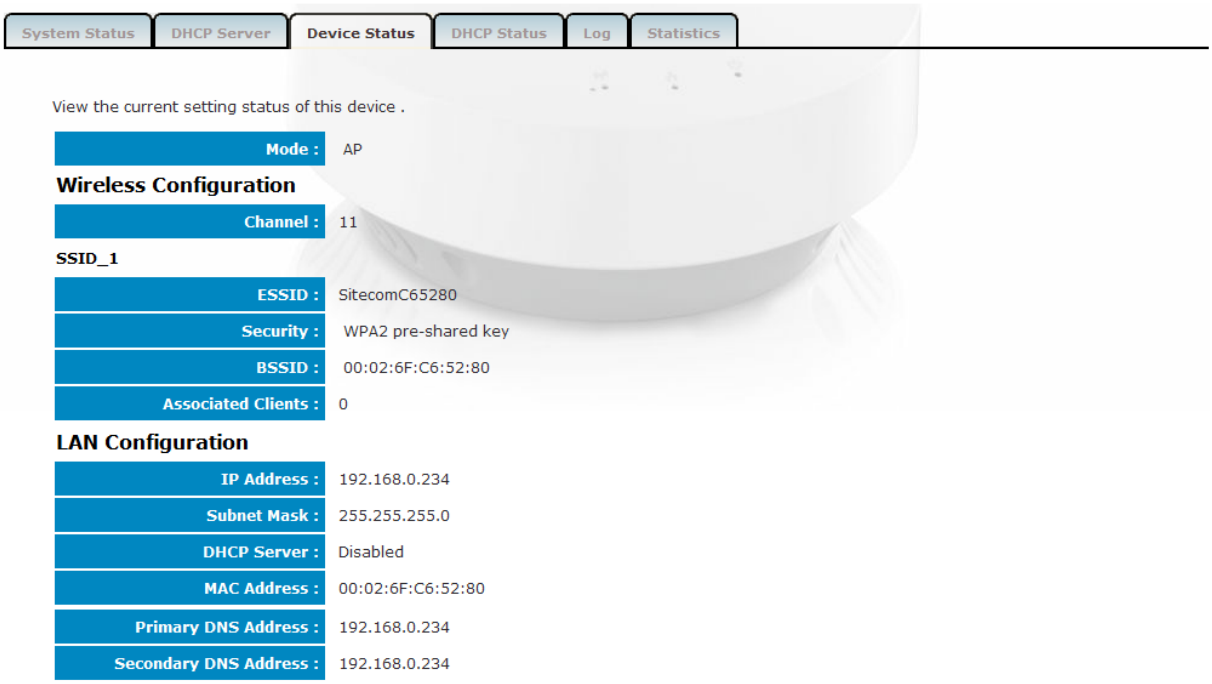
IP Address Pool You can select a particular IP address range for your DHCP server to issue IP addresses to your LAN Clients.

Note*: default IP range is 192.168.0.100 ~ 192.168.0.200. If you want your PC(s) to have a static/fixed IP address, then you'll have to choose an IP address outside this IP address Pool*

Domain Name You can specify a Domain Name for your LAN or just keep the default (sitecomwlx3000B).

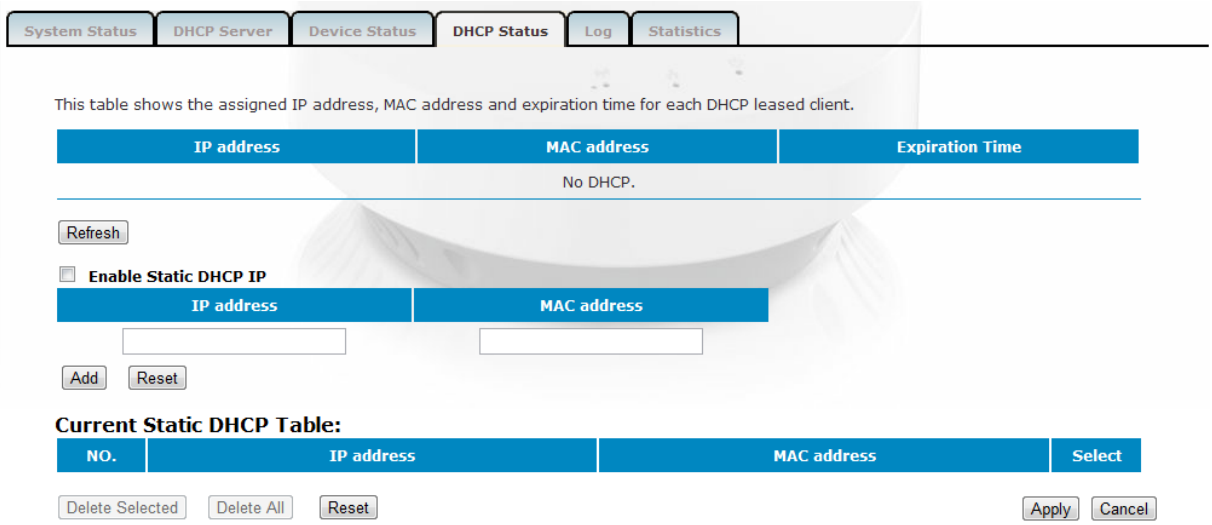
Device Status

View the Access Point's current configuration settings. Device Status displays the configuration settings you've configured in the Basic Settings / Wireless Settings section.



DHCP Status

This page shows all DHCP clients (LAN PCs) currently connected to your network. The table shows the assigned IP address, MAC address and expiration time for each DHCP leased client. Use the Refresh button to update the available information.

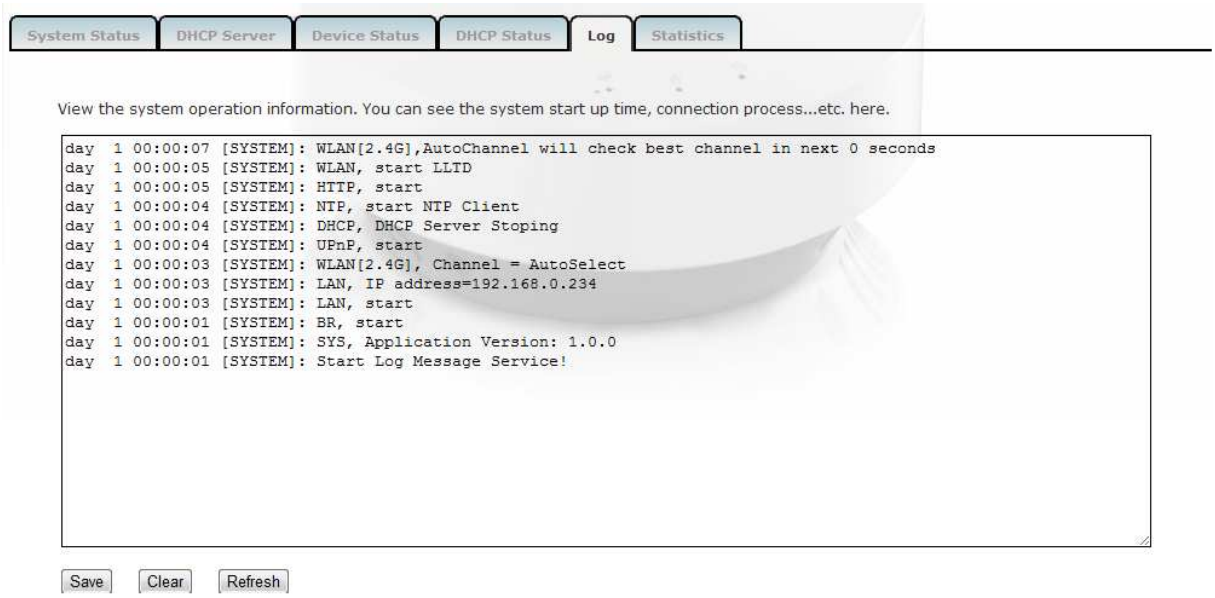


You can check **Enable Static DHCP IP**. It is possible to add more static DHCP IPs. They are listed in the table **Current Static DHCP Table**. IP can be deleted at will from the table.

Click **apply** button to save the changed configuration.

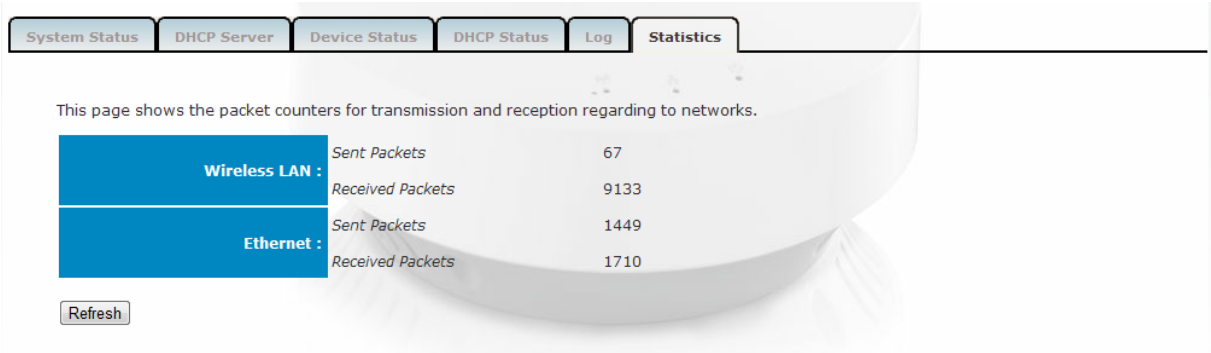
Log

View the operation log. This page shows the current system log of the Broadband router. It displays any event occurred after system start up. At the bottom of the page, the system log can be saved **<Save>** to a local file for further processing or the system log can be cleared **<Clear>** or it can be refreshed **<Refresh>** to get the most updated information. When the system is powered down, the system log will disappear if not saved to a local file.


System Status
DHCP Server
Device Status
DHCP Status
Log
Statistics
View the system operation information. You can see the system start up time, connection process...etc. here.
day 1 00:00:07 [SYSTEM]: WLAN[2.4G],AutoChannel will check best channel in next 0 seconds
day 1 00:00:05 [SYSTEM]: WLAN, start LLTD
day 1 00:00:05 [SYSTEM]: HTTP, start
day 1 00:00:04 [SYSTEM]: NTP, start NTP Client
day 1 00:00:04 [SYSTEM]: DHCP, DHCP Server Stoping
day 1 00:00:04 [SYSTEM]: UPnP, start
day 1 00:00:03 [SYSTEM]: WLAN[2.4G], Channel = AutoSelect
day 1 00:00:03 [SYSTEM]: LAN, IP address=192.168.0.234
day 1 00:00:03 [SYSTEM]: LAN, start
day 1 00:00:01 [SYSTEM]: BR, start
day 1 00:00:01 [SYSTEM]: SYS, Application Version: 1.0.0
day 1 00:00:01 [SYSTEM]: Start Log Message Service!
Save
Clear
Refresh

Statistics

Shows the counters of packets sent and received on LAN & WLAN.

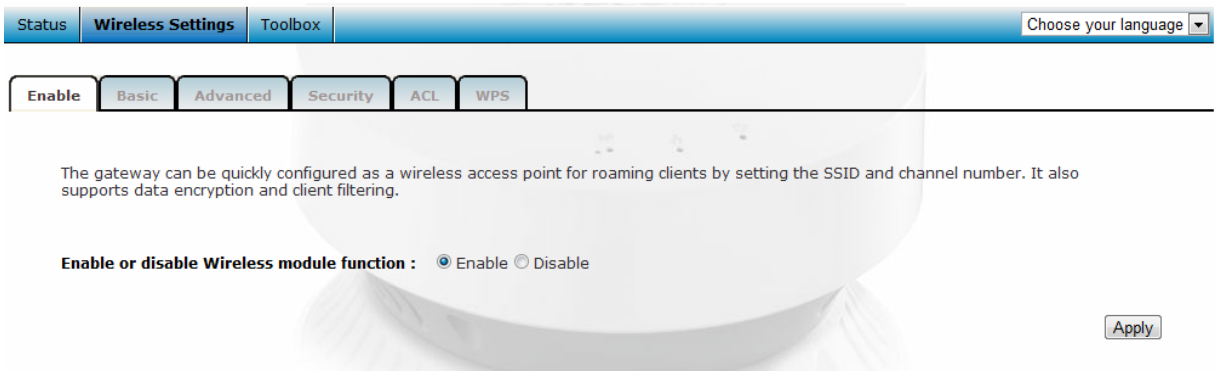


12 Wireless Settings

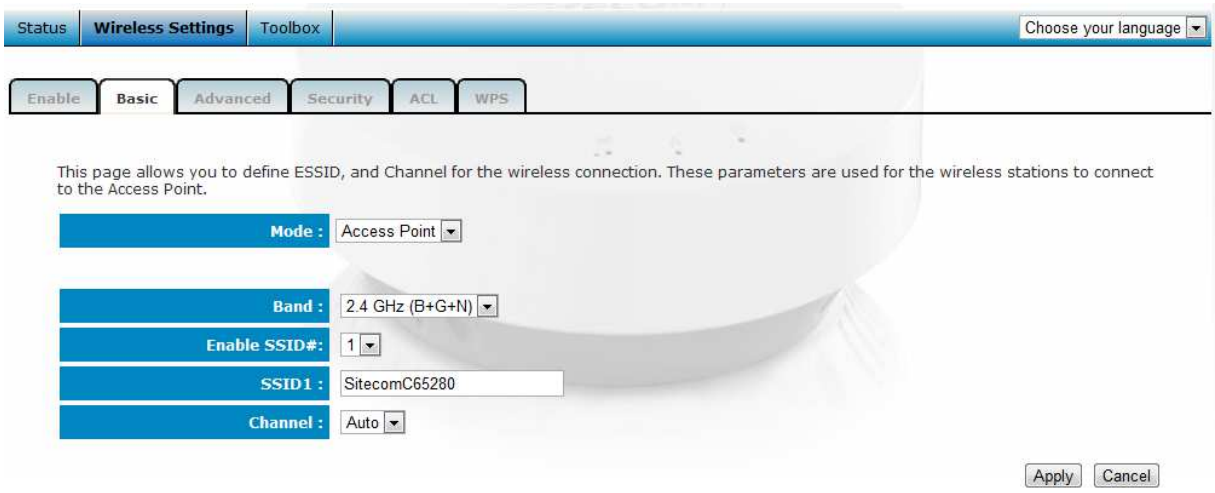
You can set parameters that are used for the wireless stations to connect to this router. The parameters include Mode, ESSID, Channel Number and Associated Client.

Enable

Enable or Disable Wireless function here. Click **Apply** and wait for module to be ready & loaded.



Basic



Mode Allows you to set AP or WDS mode.

Band Allows you to set the AP fixed at 802.11b or 802.11g mode. You can also select B+G mode to allow 80211b and 802.11g clients at the same time.

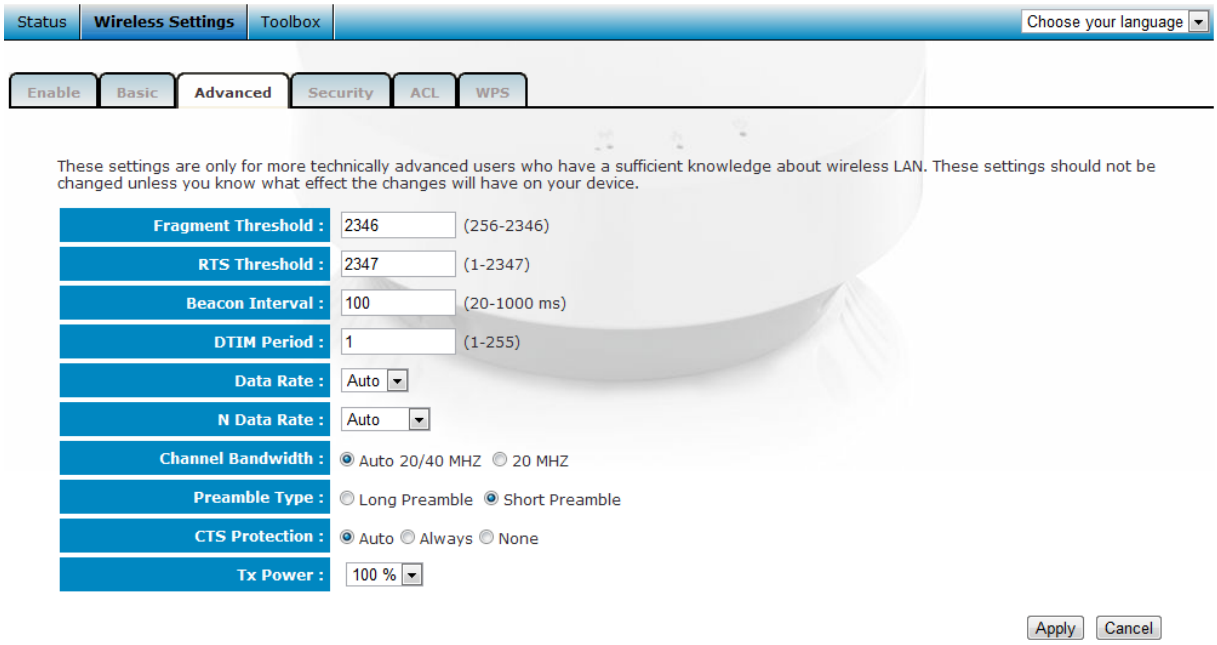
Enable SSID # Allows you to enable up to four SSIDs for this router.

SSID This is the name of the wireless signal which is broadcasted. All the devices in the same wireless LAN should have the same ESSID.

Channel The channel used by the wireless LAN. All devices in the same wireless LAN should use the same channel. When 'Auto' is selected the router will automatically determine which wireless channel is most suitable.

Advanced

This tab allows you to set the advanced wireless options. The options included are Authentication Type, Fragment Threshold, RTS Threshold, Beacon Interval, and Preamble Type. You should not change these parameters unless you know what effect the changes will have on the router.


Status
Wireless Settings
Toolbox
Choose your language
Enable
Basic
Advanced
Security
ACL
WPS
These settings are only for more technically advanced users who have a sufficient knowledge about wireless LAN. These settings should not be changed unless you know what effect the changes will have on your device.
Fragment Threshold : 2346 (256-2346)
RTS Threshold : 2347 (1-2347)
Beacon Interval : 100 (20-1000 ms)
DTIM Period : 1 (1-255)
Data Rate : Auto
N Data Rate : Auto
Channel Bandwidth : Auto 20/40 MHZ 20 MHZ
Preamble Type : Long Preamble Short Preamble
CTS Protection : Auto Always None
Tx Power : 100 %
Apply
Cancel

Authentication Type There are two authentication types: "Open System" and "Shared Key". When you select "Open System", wireless stations can associate with this wireless router without WEP encryption. When you select "Shared Key", you should also setup a WEP key in the "Encryption" page. After this has been done, make sure the wireless clients that you want to connect to the device are also setup with the same encryption key.

Fragment Threshold "Fragment Threshold" specifies the maximum size of a packet during the fragmentation of data to be transmitted. If you set this value too low, it will result in bad performance.

RTS Threshold When the packet size is smaller then the RTS threshold, the wireless router will not use the RTS/CTS mechanism to send this packet.

Beacon Interval is the interval of time that this wireless router broadcasts a beacon. A Beacon is used to synchronize the wireless network.

Data Rate The "Data Rate" is the rate that this access point uses to transmit data packets. The access point will use the highest possible selected transmission rate to transmit the data packets.

N Data Rate The "Data Rate" is the rate that this access point uses to transmit data packets for N compliant wireless nodes. Highest to lowest data rate can be fixed.

Channel Bandwidth is the range of frequencies that will be used.

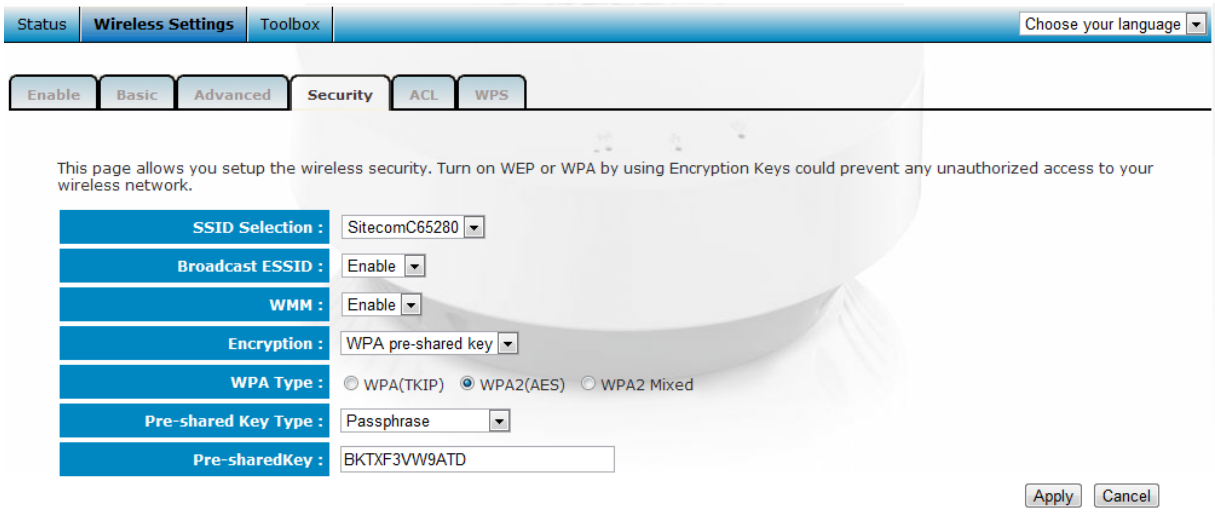
Preamble Type The "Long Preamble" can provide better wireless LAN compatibility while the "Short Preamble" can provide better wireless LAN performance.

CTS Protection: It is recommended to enable the protection mechanism. This mechanism can decrease the rate of data collision between 802.11b and 802.11g wireless stations. When the protection mode is enabled, the throughput of the AP will be a little lower due to a lot of frame-network that is transmitted.

TX Power can be set to a bare minimum or maximum power.

Security

This Access Point provides complete wireless LAN security functions, included are WEP, IEEE 802.11x, IEEE 802.11x with WEP, WPA with pre-shared key and WPA with RADIUS. With these security functions, you can prevent your wireless LAN from illegal access. Please make sure your wireless stations use the same security function, and are setup with the same security key.



SSID Selection Here you choose the SSID for which you wish to set the security.

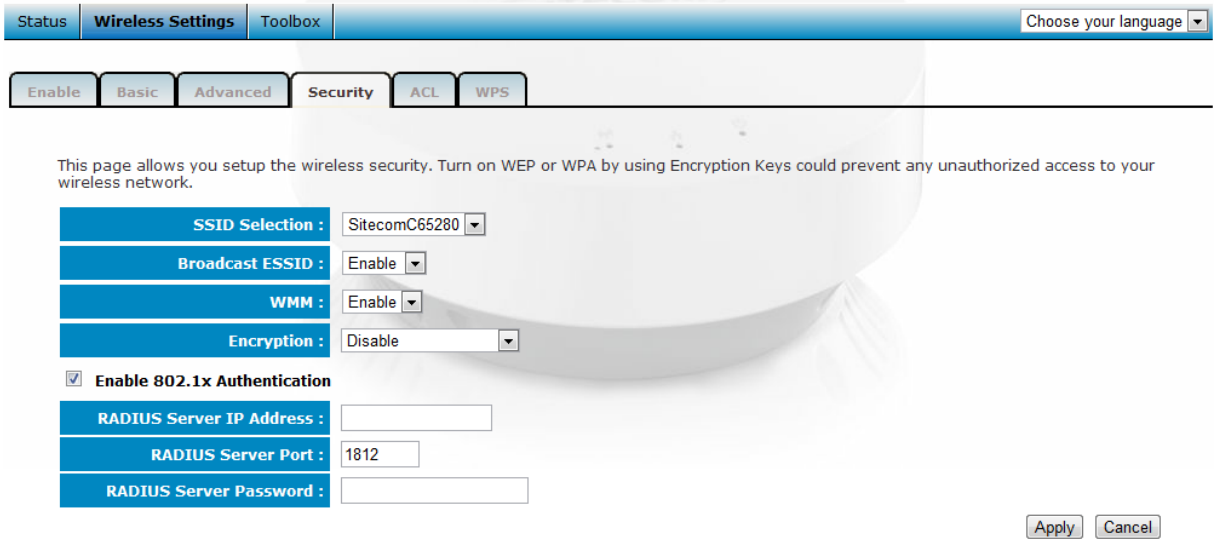
Broadcast ESSID If you enabled "Broadcast ESSID", every wireless station located within the coverage of this access point can discover this access point easily. If you are building a public wireless network, enabling this feature is recommended. Disabling "Broadcast ESSID" can provide better security.

WMM WiFi Multi Media if enabled supports QoS for experiencing better audio, video and voice in applications.

Disable

When you choose to disable encryption, it is very insecure to operate the router.

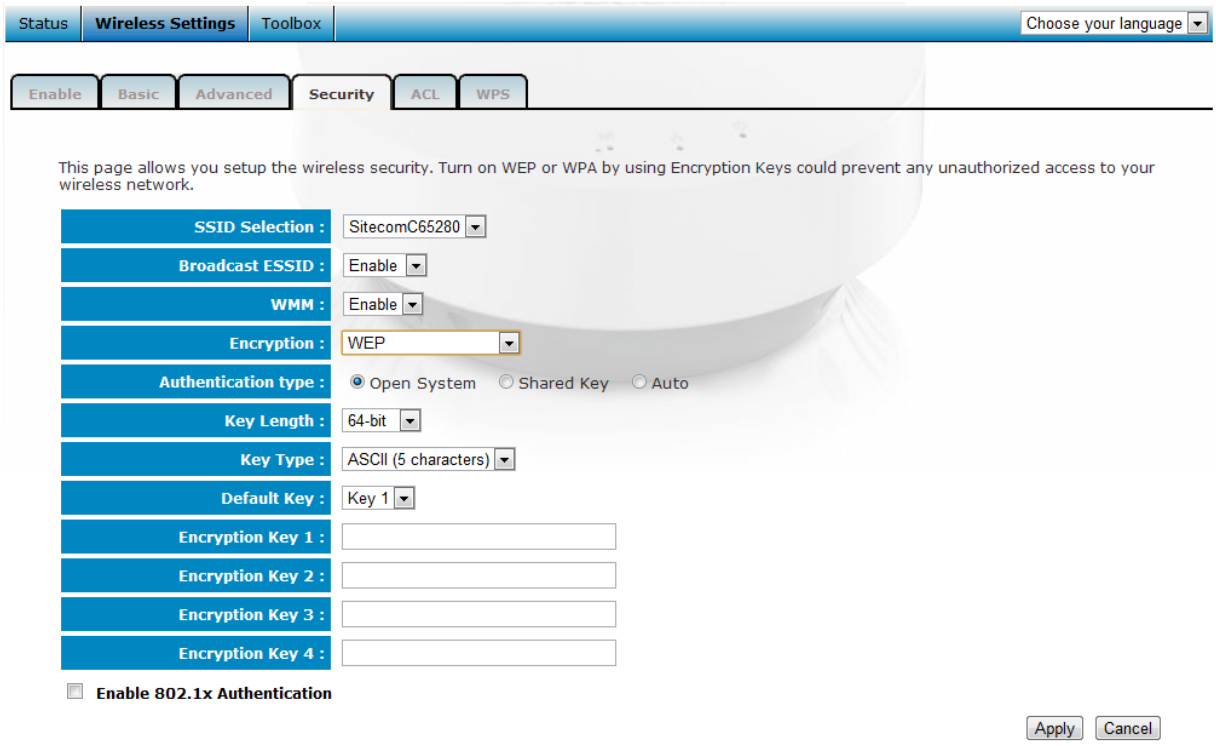
Enable 802.1x Auth



IEEE 802.1x is an authentication protocol. Every user must use a valid account to login to this Access Point before accessing the wireless LAN. The authentication is processed by a RADIUS server. This mode only authenticates users by IEEE 802.1x, but it does not encrypt the data during communication.

WEP

When you select 64-bit or 128-bit WEP key, you have to enter WEP keys to encrypt data. You can generate the key by yourself and enter it. You can enter four WEP keys and select one of them as a default key. Then the router can receive any packets encrypted by one of the four keys.



Key Length You can select the WEP key length for encryption, 64-bit or 128-bit. The larger the key will be the higher level of security is used, but the throughput will be lower.

Key Format You may select ASCII Characters (alphanumeric format) or Hexadecimal Digits (in the "A-F", "a-f" and "0-9" range) to be the WEP Key.

Key1 - Key4 The WEP keys are used to encrypt data transmitted in the wireless network. Use the following rules to setup a WEP key on the device. 64-bit WEP: input 10-digits Hex values (in the "A-F", "a-f" and "0-9" range) or 5-digit ASCII character as the encryption keys. 128-bit WEP: input 26-digit Hex values (in the "A-F", "a-f" and "0-9" range) or 13-digit ASCII characters as the encryption keys.

Click "**Apply**" at the bottom of the screen to save the above configurations. You can now configure other sections by choosing Continue, or choose Apply to apply the settings and reboot the device.

WPA Pre-shared Key

Wi-Fi Protected Access (WPA) is an advanced security standard. You can use a pre-shared key to authenticate wireless stations and encrypt data during communication. It uses TKIP or CCMP (AES) to change the encryption key frequently. So the encryption key is not easy to be cracked by hackers. This is the best security available.

WPA-Radius

Wi-Fi Protected Access (**WPA**) is an advanced security standard. You can use an external RADIUS server to authenticate wireless stations and provide the session key to encrypt data during communication. It uses **TKIP** or CCMP (**AES**) to change the encryption key frequently. Press **Apply** button when you are done.

ACL

This wireless router supports MAC Address Control, which prevents unauthorized clients from accessing your wireless network.

Enable wireless access control Enables the wireless access control function

Adding an address into the list Enter the "MAC Address" and "Comment" of the wireless station to be added and then click "Add". The wireless station will now be added into the "Current Access Control List" below. If you are having any difficulties filling in the fields, just click "Clear" and both "MAC Address" and "Comment" fields will be cleared.

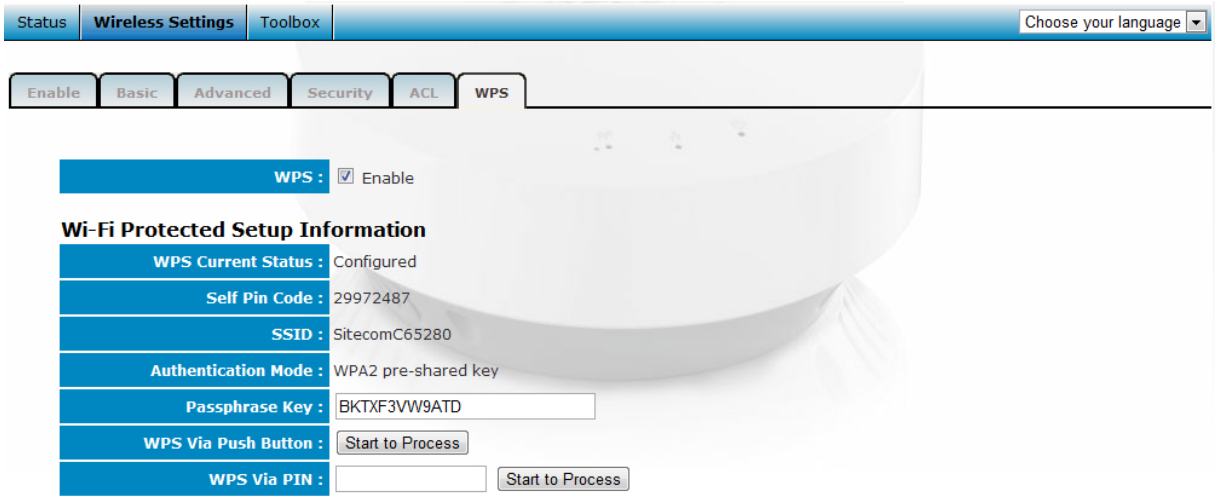
Remove an address from the list If you want to remove a MAC address from the "Current Access Control List ", select the MAC address that you want to remove in the list and then click "Delete Selected". If you want to remove all the MAC addresses from the list, just click the "Delete All" button. Click "Reset" will clear your current selections.

Click <Apply> at the bottom of the screen to save the above configurations. You can now configure other sections by choosing Continue, or choose Apply to apply the settings and reboot the device.

WPS

Wi-Fi Protected Setup (WPS) is the simplest way to establish a connection between the wireless clients and the wireless router. You don't have to select the encryption mode and fill in a long encryption passphrase every time when you try to setup a wireless connection. You only need to press a button on both wireless client and wireless router, and WPS will do the rest for you.

The wireless router supports two types of WPS: WPS via Push Button and WPS via PIN code. If you want to use the Push Button, you have to push a specific button on the wireless client or in the utility of the wireless client to start the WPS mode, and switch the wireless router to WPS mode. You can simply push the WPS button of the wireless router, or click the 'Start to Process' button in the web configuration interface. If you want to use the PIN code, you have to know the PIN code of the wireless client and switch it to WPS mode, then fill-in the PIN code of the wireless client through the web configuration interface of the wireless router.



WPS Check the box to enable WPS function and uncheck it to disable the WPS function.

WPS Current Status If the wireless security (encryption) function of this wireless router is properly set, you'll see a 'Configured' message here. Otherwise, you'll see 'UnConfigured'.

Self Pin Code This is the WPS PIN code of the wireless router. You may need this information when connecting to other WPS-enabled wireless devices.

SSID This is the network broadcast name (SSID) of the router.

Authentication Mode It shows the active authentication mode for the wireless connection.

Passphrase Key It shows the passphrase key that is randomly generated by the wireless router during the WPS process. You may need this information when using a device which doesn't support WPS.

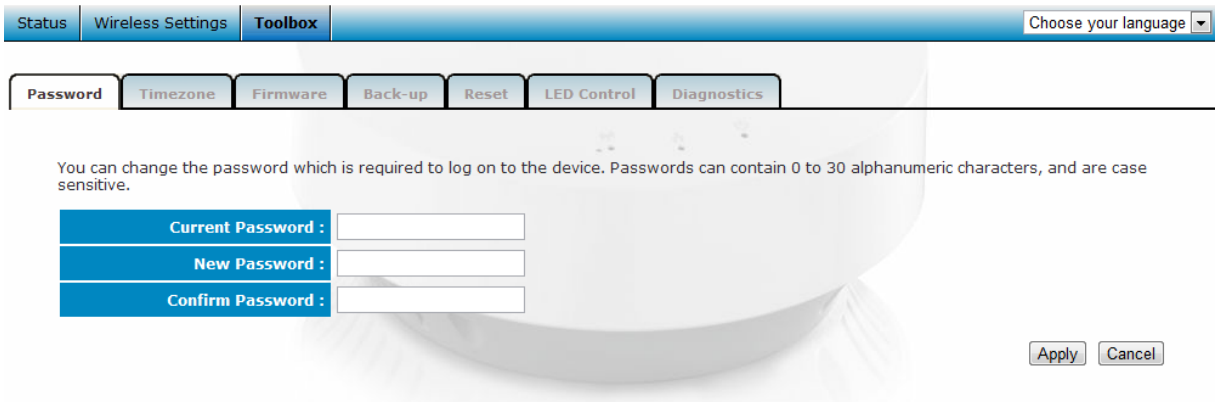
WPS via Push Button Press the button to start the WPS process. The router will wait for the WPS request from the wireless devices within 2 minutes.

WPS via PIN You can fill-in the PIN code of the wireless device and press the button to start the WPS process. The router will wait for the WPS request from the wireless device within 2 minutes.

13 Toolbox

Password

You can change the password required to log into the broadband router's system web-based management. Passwords can contain 0 to 12 alphanumeric characters, and are case sensitive.



Current Password Fill in the current password to allow changing to a new password.

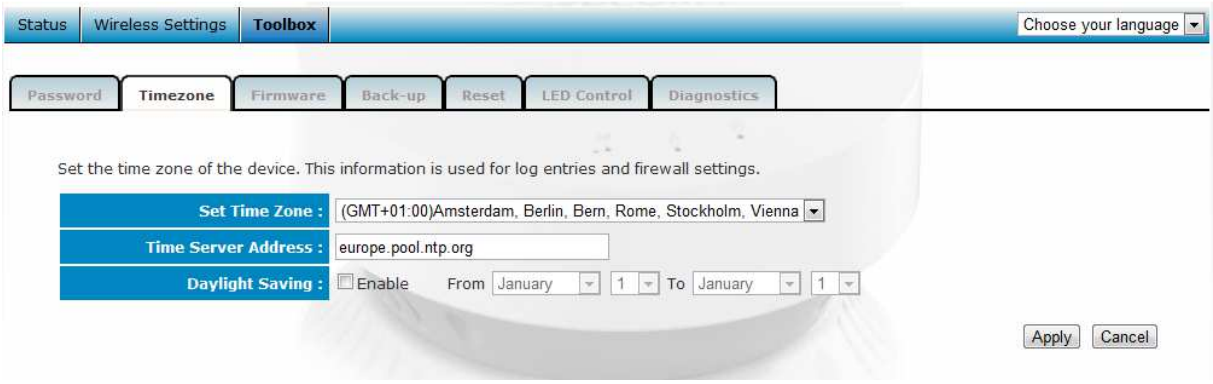
New Password Enter your new password.

Confirmed Password Enter your new password again for verification purposes.

Click <**Apply**> at the bottom of the screen to save the above configurations

Timezone

The Time Zone allows your router to base its time on the settings configured here, which will affect functions such as Log entries and Firewall settings.



Set Time Zone Select the time zone of the country you are currently in. The router will set its time based on your selection.

Time Server Address You can set an NTP server address.

Enable Daylight Savings The router can also take Daylight savings into account. If you wish to use this function, you must check/tick the enable box

to enable your daylight saving configuration (below).

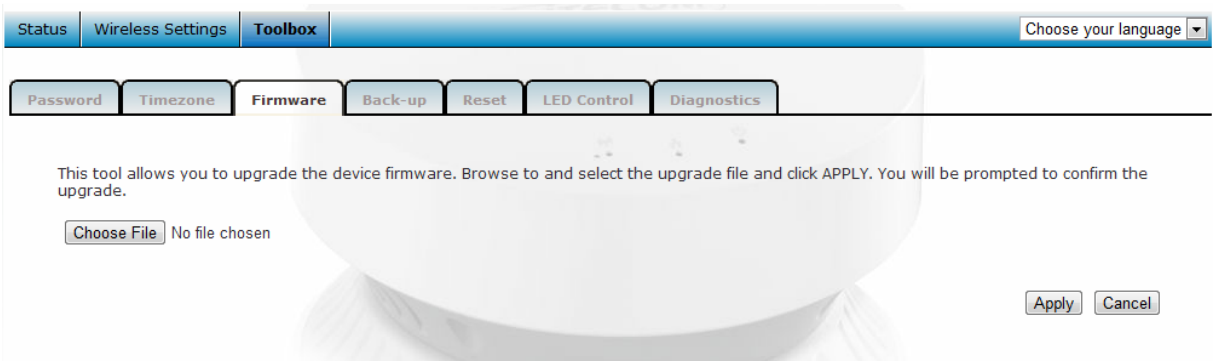
Start Daylight Savings Time Select the period in which you wish to start daylight Savings Time

End Daylight Savings Time Select the period in which you wish to end daylight Savings Time

Click <**Apply**> at the bottom of the screen to save the above configurations

Firmware

This page allows you to upgrade the router's firmware.



Enable automatic firmware update When enabled the router will periodically check if a new firmware is available, I a new firmware is detected the router will give a notification.

Firmware Upgrade This tool allows you to upgrade the Broadband router's system firmware. To upgrade the firmware of your Broadband router, you need to download the firmware file to your local hard disk, and enter that file name and path in the appropriate field on this page. You can also use the Browse button to find the firmware file on your PC.

Once you've selected the new firmware file, click <**Apply**> at the bottom of the screen to start the upgrade process

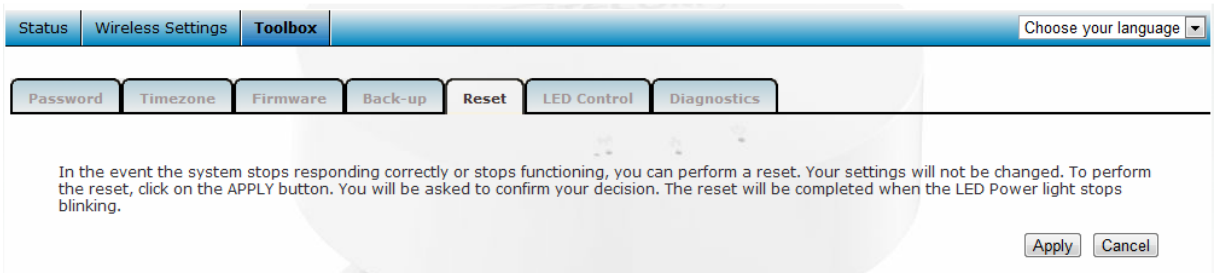
Back-up

The Backup screen allows you to save (Backup) the router's current configuration settings. When you save the configuration setting (Backup) you can re-load the saved configuration into the router through the Restore selection. If extreme problems occur you can use the Restore to Factory Defaults selection, this will set all configurations to its original default settings (e.g. when you first purchased the router).

Use the "Backup" tool to save the Broadband router current configuration to a file named "**config.bin**" on your PC. You can then use the "Restore" tool to restore the saved configuration to the Broadband router. Alternatively, you can use the "Restore to Factory Defaults" tool to force the Broadband router to perform a power reset and restore the original factory settings.

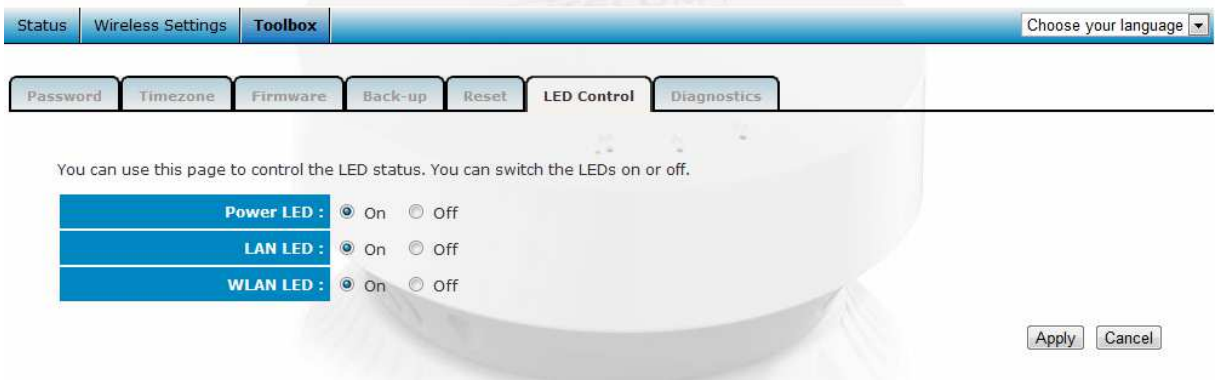
Reset

You can reset the router's system should any problem exist. The reset function essentially re-boots your router's system.


Status
Wireless Settings
Toolbox
Choose your language
Password
Timezone
Firmware
Back-up
Reset
LED Control
Diagnostics
In the event the system stops responding correctly or stops functioning, you can perform a reset. Your settings will not be changed. To perform the reset, click on the APPLY button. You will be asked to confirm your decision. The reset will be completed when the LED Power light stops blinking.
Apply
Cancel

LED Control

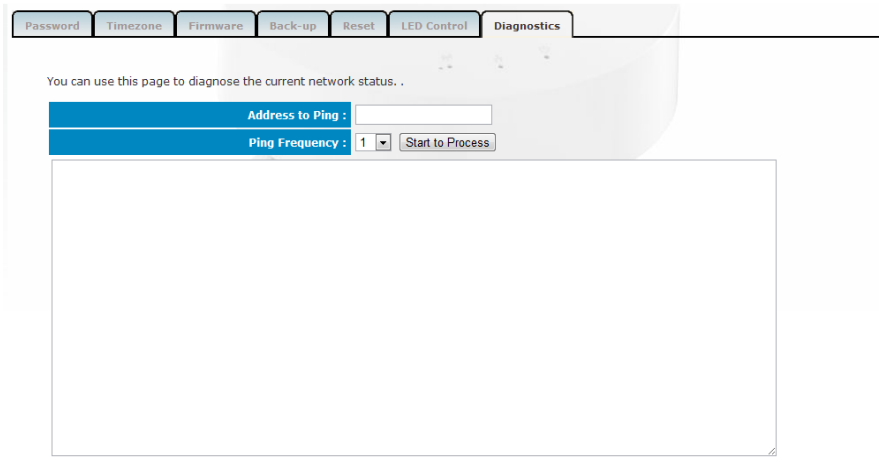
This page allows you to control LED on/off for Power, LAN interface and WLAN interface.



Once you have made the desired changes, Click '**Apply**' for the settings to take effect.

Diagnostics

This page allows you to test your network. Type in the address for diagnostics.



Address to Ping Enter the IP address you like to see if a successful connection can be made.

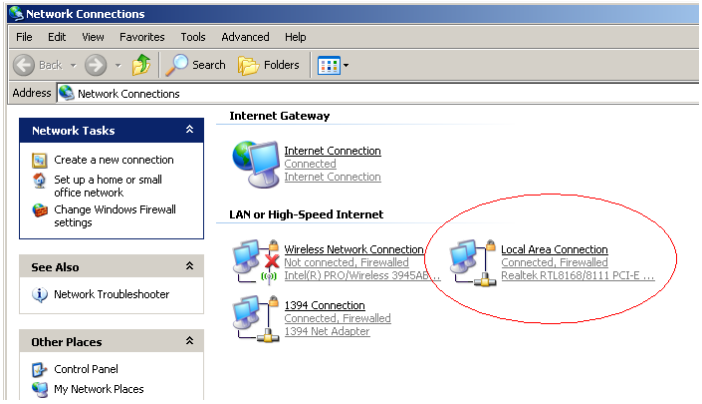
Ping Frequency Select the frequency for Ping test.

Ping Result The results of the Ping test.

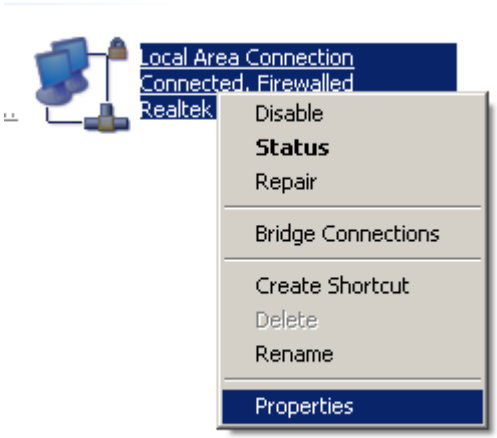
14 Setting PC Network settings to dynamic IP

Windows XP

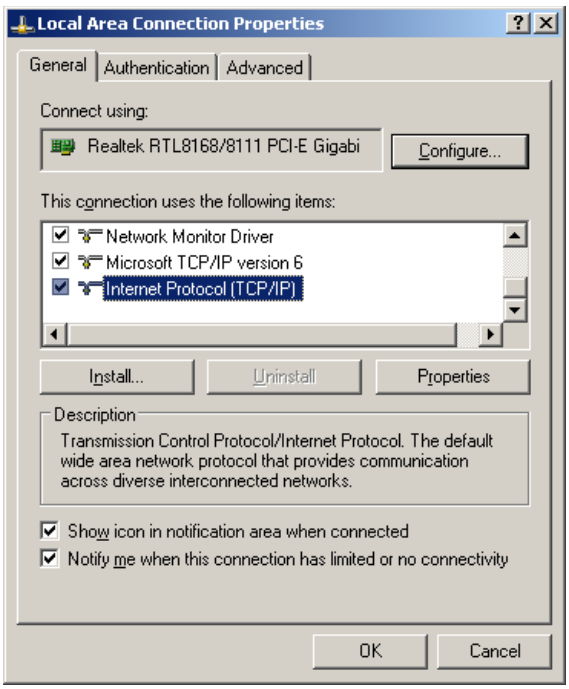
- Enter [Start Menu] → select [Control panel] → select [Network].

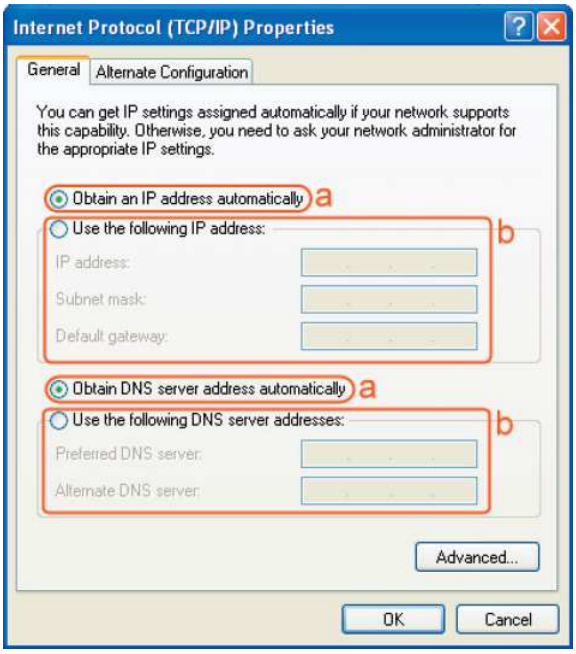


- Select [Local Area Connection]) icon=>select [properties]



- Select [Internet Protocol (TCP/IP)] =>Click [Properties].



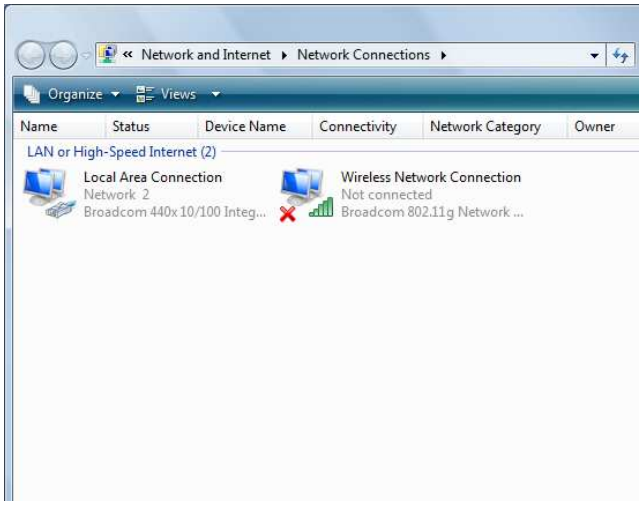


- Select the [General] tab.

  The router supports [DHCP] function, please select both [Obtain an IP address automatically] and [Obtain DNS server address automatically].

Windows Vista/Seven

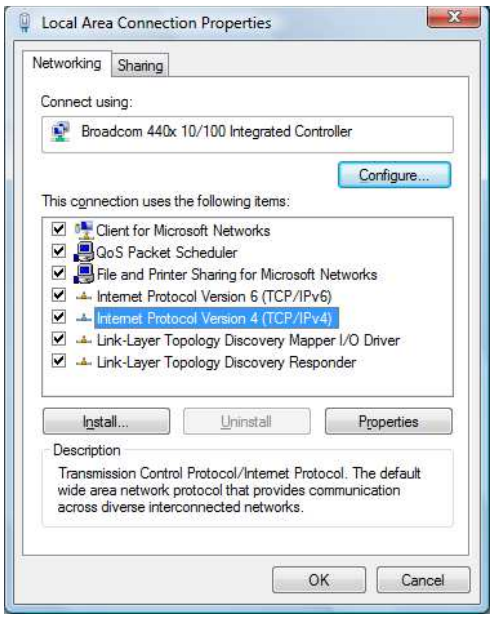
- Enter [Start Menu] → select [Control panel] → select [View network status and tasks] -> select [Manage network connections].



- Select [Local Area Connection]) icon=>select [properties]

Network and Internet
Network Connections
Organize
Views
Disable this network device
Name
Status
Device Name
Connectivity
LAN or High-Speed Internet (2)
Local Area Connection
Network 2
Broadcom 440x10
Wireless Network Co
Disable
Status
Diagnose
Bridge Connections
Create Shortcut
Delete
Rename
Properties

- Select [Internet Protocol Version 4 (TCP/IPv4)] =>Click [Properties].



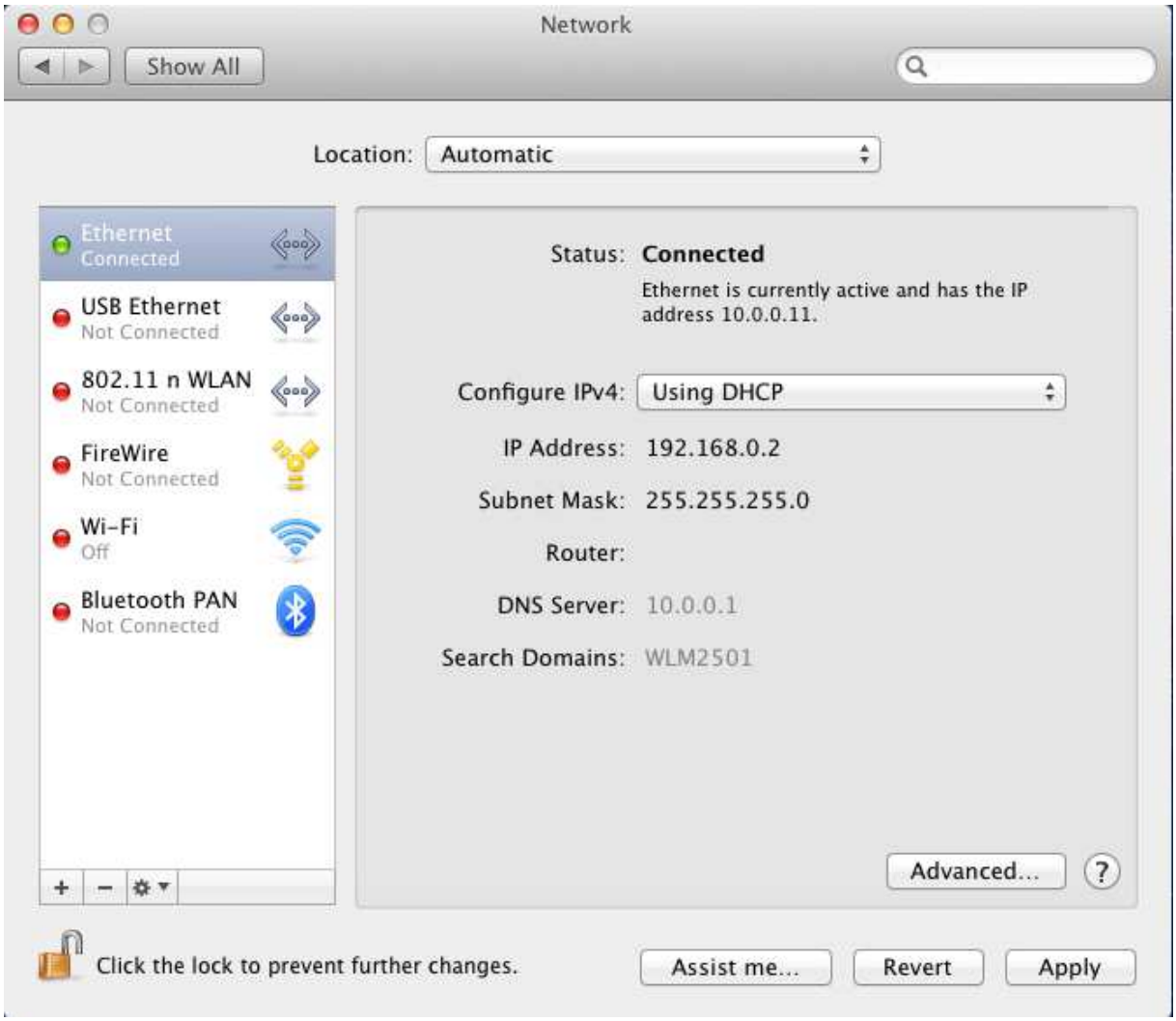
Internet Protocol Version 4 (TCP/IPv4) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

- Select the [General] tab.
- The router supports [DHCP] function, please select both [**Obtain an IP address automatically**] and [**Obtain DNS server address automatically**].

MAC OS

- Click on '**System preferences**'.

- Click on '**Network**'.



Select Configure IPv4 : '**Using DHCP**'.

Click '**Apply**' when finished.

Parts of the firmware of the WLX-3000B Wireless device are subject to the GNU general public license.

Appendix A: Licensing Information

This product includes third-party software licensed under the terms of the GNU General Public License.. You can modify or redistribute this free software under the terms of the GNU General Public License. Please see Appendix B for the exact terms and conditions of this license.

Specifically, the following part of this product is subject to the GNU GPL:

#	Package name	Source
1	Linux v2.6.30	www.kernel.org
2	busybox v1.7.5	http://www.busybox.net/
3	termcap v1.3.1	ftp://ftp.gnu.org/gnu/termcap
4	libupnp v1.6.0	http://pupnp.sourceforge.net/
5	pcre v7.x	http://www.pcre.org/
6	popt v1.7	http://freecode.com/projects/popt
7	iproute2 v2.6.34	http://www.linuxfoundation.org/en/Net:Iproute2
8	iptables v1.4.4	http://www.netfilter.org/projects/iptables/index.html
9	linuxigd v1.0	http://linux-igd.sourceforge.net/index.php
10	wireless_tools v28	http://www.hpl.hp.com/personal/Jean_Tourrilhes/Linux/Tools.html
11	udhcp v0.9.9-pre	http://sources.busybox.net/index.py/trunk/udhcp-web/index.html?revision=9967
12	uboot v1.1.4	http://www.denx.de/wiki/U-Boot
13	gcc v4.3.4	http://gcc.gnu.org/
14	uclibc v0.9.29	http://www.uclibc.org
15	zlib v1.2.3	http://www.zlib.net/
16	mtd-utils v1.2	http://git.infradead.org
17	wget-1.11.x	http://www.gnu.org/software/wget/

Availability of source code

Sitecom Europe BV has made available the full source code of the GPL licensed software, including any scripts to control the compilation and installation of the object code in the driver section of this product.

No Warranty

The free software included in this product is distributed in the hope that it will be useful, but WITHOUT ANY LIABILITY OF OR ANY WARRANTY FROM THE LICENSOR.

Appendix B: GNU GENERAL PUBLIC LICENSE

Version 2, June 1991 Copyright (C) 1989, 1991 Free Software Foundation, Inc. 59 Temple Place - Suite 330, Boston, MA 02111-1307, USA Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

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the source code. And you must show them these terms so they know their rights. We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software. Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations. Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all. The precise terms and conditions for copying, distribution and modification follow.

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Revision 1.0
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